



# WISCONSIN DEPARTMENT OF NATURAL RESOURCES & THE MANITOBA LEGACY

SECURING A LEGACY OF HABITAT CONSERVATION IN MANITOBA WITH  
ENDURING BENEFITS FOR CURRENT AND FUTURE GENERATIONS TO ENJOY



## YOUR CONSERVATION REPORT

**APRIL 2018 – MARCH 2019 CONSERVATION REPORT**

*Submitted by Ducks Unlimited Canada and Ducks Unlimited, Inc.*





# OVERVIEW

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THIS REPORT HIGHLIGHTS DUC'S HABITAT ACCOMPLISHMENTS WITHIN MANITOBA'S MINNEDOSA/SHOAL, KILLARNEY, ALEXANDER GRISWOLD AND VIRDEN PRIORITY AREAS DURING THE PERIOD OF APRIL 1, 2018 TO MARCH 31, 2019.

## ***Ducks Unlimited (DU) is the world leader in wetland conservation.***

Since 1937, DU has invested over two billion dollars in waterfowl and wildlife habitat conservation in the United States, Canada and Mexico. In Canada alone, DU has completed over 11,890 habitat projects, securing 6.5 million acres and positively influencing over 163.5 million acres of habitat that benefit waterfowl, wildlife and people. Besides waterfowl, numerous species of wildlife, including many threatened or endangered species live and flourish on DU projects.

The Wisconsin Department of Natural Resources (WDNR) have contributed to waterfowl conservation on the Canadian Prairies since 1968. This partnership with DU recognizes the importance of Canadian waterfowl production to the Wisconsin hunter.

## ***Over the past 51 years, WDNR has contributed over \$5.9 million to this effort.***

In the spring of 2017, DU requested funding from the WDNR in response to the critical waterfowl needs of the Manitoba Prairie Pothole Region (PPR). This request was for the amount of \$200,000 to support DUC's conservation efforts in FY2018 and 2019 on these breeding grounds.

**WDNR has identified \$137,098.62 to support this important work in 2019.** This final report highlights WDNR funding that was matched by DU and the combined total matched by the North America Wetlands Conservation Act (NAWCA) to realize \$548,395.48. With a strong U.S. dollar we applied an exchange gain of 1.24 on the funding resulting in \$680,009.16 CAD in support of conservation efforts in the Manitoba PPR priority areas and surrounding landscapes.





# BASED ON SOUND SCIENCE

## SOUND SCIENCE

DUC uses the best scientific research available to direct, evaluate and modify DUC's conservation programs and practices so that DUC can most effectively meet the conservation needs of waterfowl in the PPR. This union of science and conservation sets DUC apart from other non-government conservation organizations in Canada.

For over 30 years, DUC has lead waterfowl research and conservation program evaluation in Prairie Canada. During the PHJV assessment study scientists radio tracked 3,920 mallard hens and documented the fate of over 10,000 nests. This data provides a strong understanding of nesting duck habitat selection and success, and which conservation efforts provide the highest return by way of positive impact on duck breeding success.

The research supports DUC's efforts to develop strategic waterfowl habitat recovery plans that are implemented and evaluated using a waterfowl productivity model that relates duck production to habitat condition. Based on the model, DUC has defined waterfowl needs for its priority landscapes in the PPR and specifically, habitat actions needed to restore duck populations within these landscapes. These needs are represented in the habitat objectives set out in the PHJV Implementation Plan.

DUC, Canadian government and industry partners have committed to research to better understand landscape change. Studies on wetland loss, nutrient loading, flood prediction and carbon sequestration has been a recent focus of DUC's science effort. This work has led to valuable science currently guiding changes to wetland protection, watershed planning and agricultural programs on the Canadian prairies.

***Wetland conservation that benefits our environment, economy and future, and is based on sound science will further help sustain North America's waterfowl populations.***



## YOUR SUPPORT IS KEY

The WDNR contract provides a significant contribution to the goals of the PHJV. Although much remains to be accomplished, this funding is critical to our joint efforts to reach these important waterfowl goals.

DUC is a proud partner of the NAWMP. The PHJV, a partnership led by federal and provincial governments, DUC, Nature Conservancy of Canada and Wildlife Habitat Canada, has collaborated on waterfowl conservation under NAWMP in Prairie Canada since 1986. DUC leads the delivery of conservation programs and science to support NAWMP goals on the Canadian prairies. The success of DUC's programs in Manitoba, particularly in the prairie pothole-laden target areas, are critical in supporting the NAWMP goal of achieving sustainable waterfowl production. The PHJV goal is to protect, restore and enhance an additional 15 million acres over the next 25 years of the NAWMP.





# PRIORITY AREAS

## BAND RECOVERIES

**Below:** Origin of ducks harvested in Wisconsin from 1986-2012.



**Manitoba is an important source for waterfowl migrating to Wisconsin.**

Historical waterfowl band recovery data has established a clear link between waterfowl produced and banded in Manitoba and overall migratory populations in the lower mississippi flyway are substantial to the overall waterfowl population of the Mississippi Flyway. Data further supports that the priority areas targeted by the WDNR funding are a primary source for waterfowl harvested in Wisconsin.

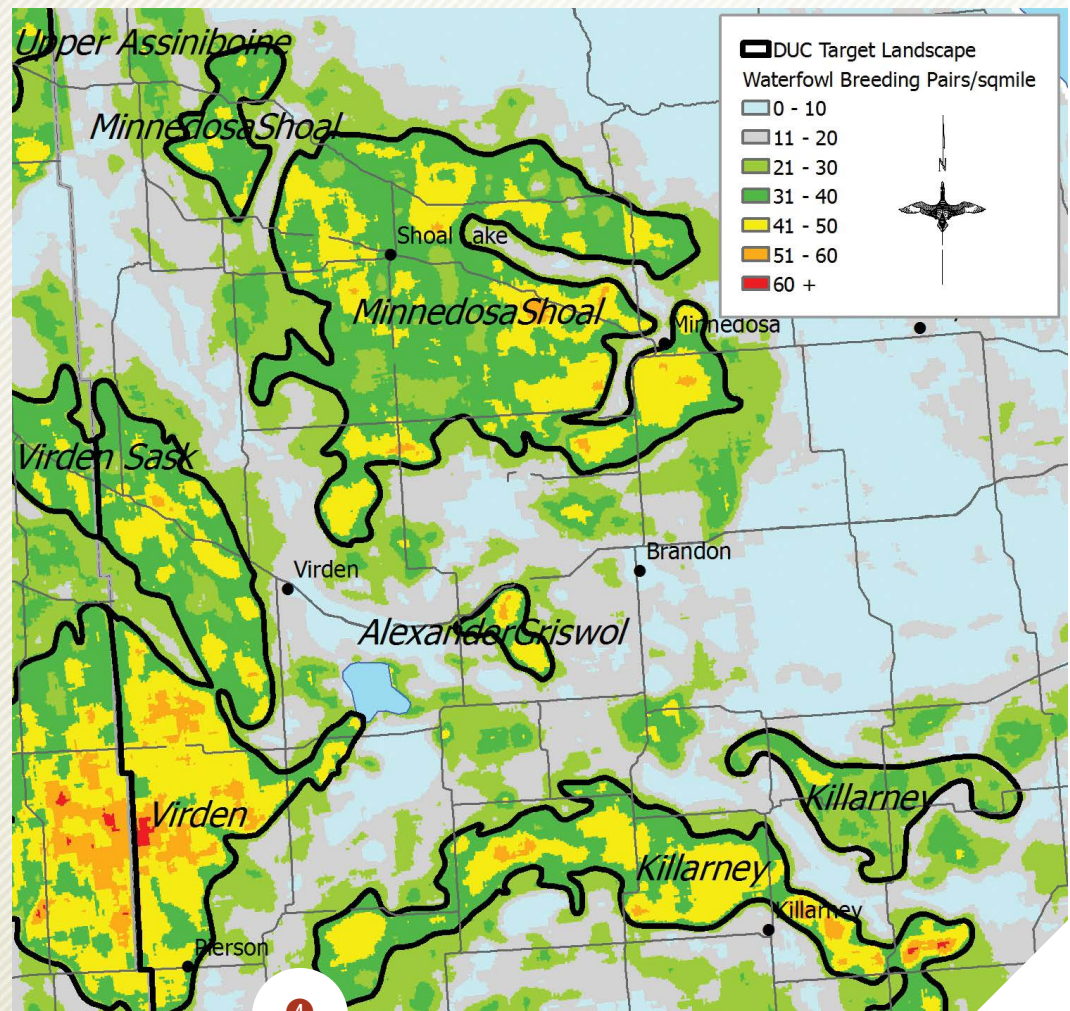
Efforts must strategically conserve the ‘best of the best’ of these habitats to most effectively benefit waterfowl populations and provide enduring benefits for years to come.

The highest densities of breeding ducks in North America occur in the Prairie Pothole Region of Canada. Located within the PPR are the Prairie and Aspen Parkland Eco-regions of Manitoba, which are composed of a diversity of wetland and upland habitats. These habitat characteristics make this area key to waterfowl production and provide a basis to strategically deliver conservation programs. Based on the U.S. Fish and Wildlife Service survey data, the PPR and particularly these priority areas, continue to stand out as the ‘best of the best’ breeding habitats in North America, despite ongoing and historic habitat loss.

Key priority areas within the PPR of Manitoba have been selected as the focus for WDNR funding. These include the Minnedosa/Shoal, Killarney, Alexander Griswold and Virden priority areas (see map below).

## WATERFOWL BREEDING

**Right:** Breeding duck density and distribution within the PPR of Manitoba. Yellow, orange and red areas represent the highest duck densities in the province. This map is based on over 60 years of U.S. Fish & Wildlife Service survey data and represents average waterfowl distribution over the long term.





# ACCOMPLISHMENTS

## FUNDING

The WDNR's contract amount of **\$137,098.62** toward the priority areas in the Manitoba Prairie Pothole Region was matched by DU and NAWCA, totaling **\$548,395.48**. An exchange gain of 1.24 resulted in **\$680,009.16** CAD expended.



DU and NAWMP remain focused on the PPR of Canada and Canadian partners continue to grow their support with long-term match at 50% of the total funds expended under the NAWMP in Canada.

Based on the 2018 approved application, DUC has delivered against specific objectives for the following habitat initiatives in Manitoba in FY2019.

### FY19 Accomplishments

Habitat Initiative	Accomplishments (acres)	Program Cost
Habitat Retention	742	\$496,778
Wetland Restoration	12	\$17,854
Upland Restoration	290	\$68,954
Habitat Asset Management	50,007*	\$96,423
<b>Total</b>	<b>1,044</b>	<b>\$680,009</b>

\* Habitat Asset Management acres are not incremental and are therefore not included in the total acre goals.

### Habitat Retention

Drainage of wetlands and breaking of native grass uplands continue to be the most significant activities negatively impacting waterfowl. DUC uses a variety of program tools to protect remaining habitats that are vital to the long-term waterfowl productivity of Manitoba.

**Conservation easements and agreements** – protect habitats on private lands by offering financial incentives for varying levels of protection. All conservation easements are perpetual and are often done in partnership with provincial and federal government agencies. The average cost is \$678.07/acre.

**Land purchase** – the most intensive program that DU delivers and is an important tool to protect highly valued habitats at high risk. As the cost of purchasing land continues to rise, DU invests in habitat to ensure the greatest waterfowl benefits are derived. This year DU did not identify lands to purchase that would meet our stringent requirements..

**Wetland rebuilds** – a re-investment into existing wetland projects that are highly productive and successful for waterfowl. These projects have met and surpassed their original design and agreement terms and require new infrastructure and agreements to ensure their productive capacity for another 30 years. DU renews agreements with the landowners on the project and constructs or repairs the required physical improvements to maximize wetland productivity and waterfowl recruitment.

### Wetland Restoration

Most wetland restoration work has to occur on private lands. More than 80 years of program delivery has taught us that it takes a combination of intensive and extensive programs to successfully work with producers. DUC is currently using other programs such as revolving land purchase to initiate efforts to restore wetlands. Goals for wetland restoration continue to increase due an increased opportunity to complete construction on a number of basins. Wetland restoration occurred through conservation easements and conservation agreements. All wetlands are protected into perpetuity.





## WINTER WHEAT

Winter wheat, which is a fall-seeded crop, is particularly beneficial to northern pintails, a species that remains below long term populations since the late 1970s.

# ACCOMPLISHMENTS

## *Upland Restoration*

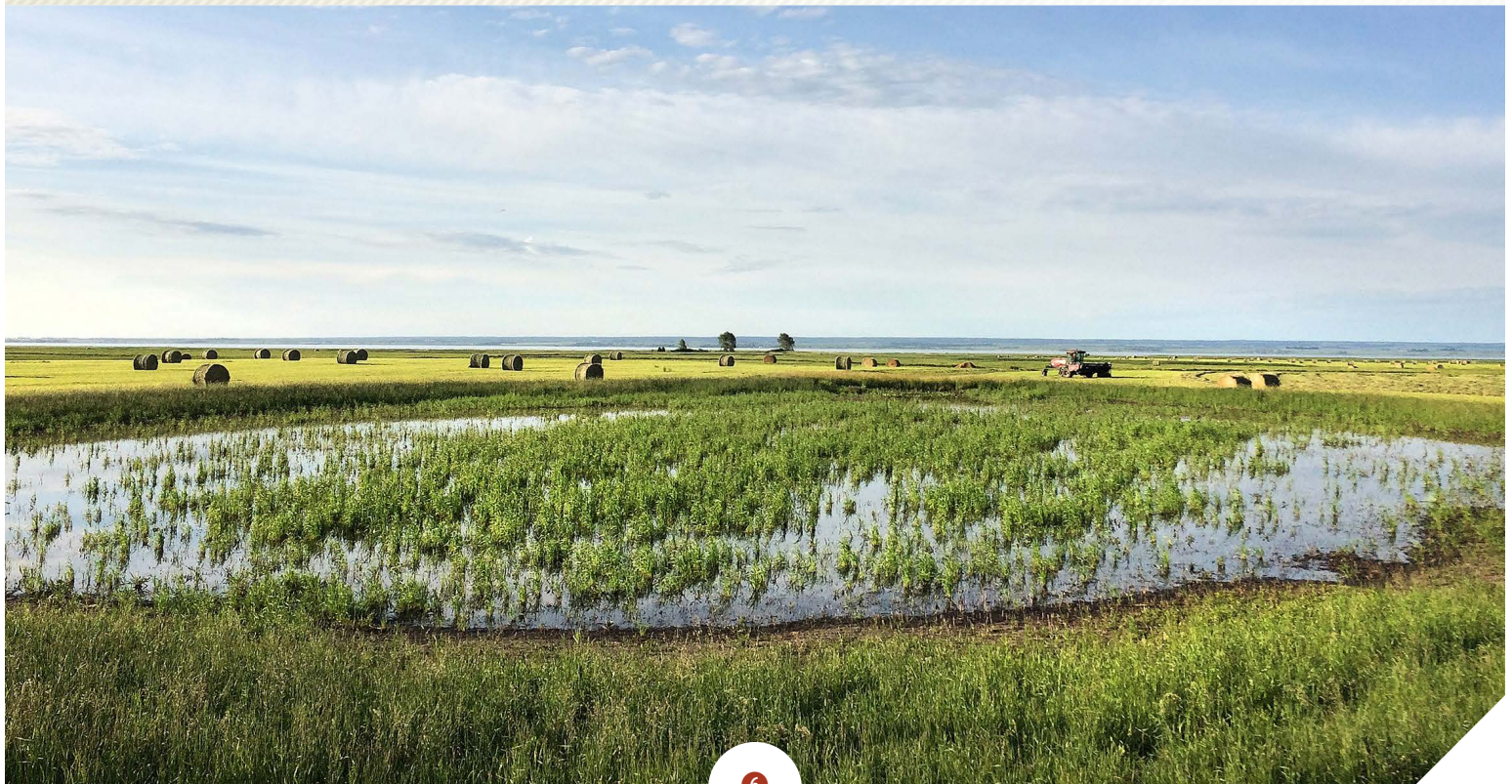
Duck nest success is a major influential factor for continental waterfowl populations. Improving nest success in the priority areas and surrounding PPR will require the restoration of grass to provide secure nesting habitat. DUC focused significant efforts on restoring perennial cover in the priority areas through two primary efforts:

**Forage conversion programs** – provide incentives to landowners to convert cultivated land to perennial cover to provide waterfowl nesting benefits and support the beef industry. For waterfowl, the increase in forage provides more nesting choices with better protection from predators. Under this contract 894 acres of cultivation was converted to forages for a minimum of 10 years.

**Winter wheat programs** – focus on the agronomic and economic benefits of the crop to the producer. Approaches vary from supporting research to developing new varieties that are more successful in the Canadian prairies, to working more directly with the producers through incentive or extension programs. DUC's research has confirmed that there are 24 times more ducks hatched in winter wheat compared to spring wheat on a per acre basis because both nest success and density increase.

## *Habitat Asset Management*

The successful delivery of conservation programs has been occurring over the past 81 years of DU's existence. This represents a substantial investment by DU and many other partners to place a valuable network of habitat projects across Manitoba and the rest of the breeding grounds. In order to ensure these projects return the maximum benefit to waterfowl an annual investment of resources is required. HAM activities include annual maintenance, grassland rejuvenation, water level management and repair of damaged water level management infrastructure.







Ducks Unlimited and the Wisconsin Department of Natural Resources are working together to conserve the 'best of the best' waterfowl habitats in Manitoba.

## SECURING A LEGACY

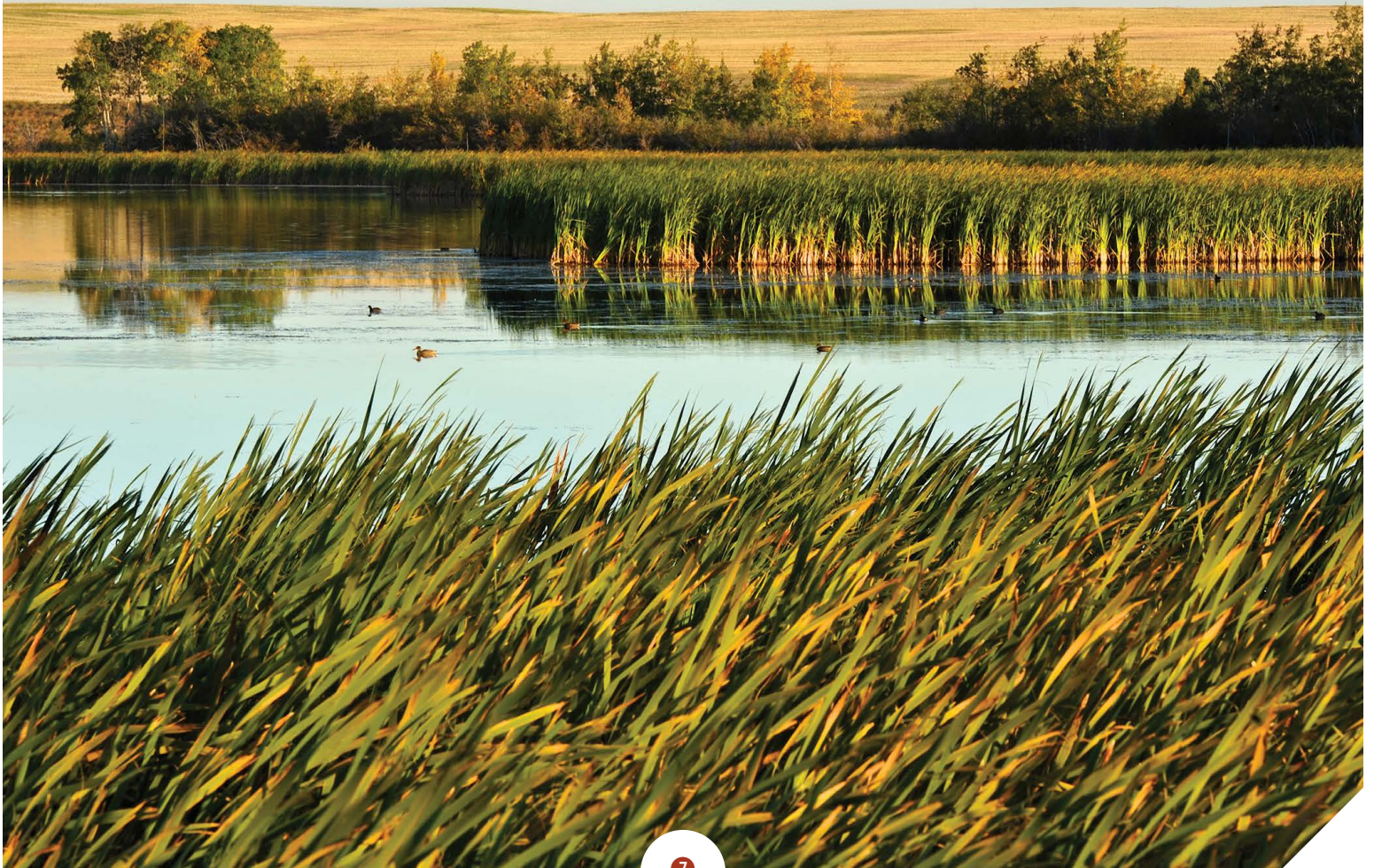
***Ducks Unlimited is the world leader in wetland conservation.***

The PHJV Implementation Plan and DU have set habitat objectives to fully recover the Canadian Prairies and to sustain waterfowl production. Continued partnerships will be the key to success.

DU values its relationship with WDNR and recognizes them as a key player in supporting NAWMP conservation efforts in Canada. However, increased support from all partners is needed if the goals of NAWMP are to be met.

The waterfowl community continues to recognize habitat programs as the primary solution to waterfowl recovery. DUC is the primary delivery agent of the NAWMP program in the PPR of Canada.

**Your support and continued action on the Canadian Prairies means that critical waterfowl habitat will be protected in the top waterfowl production area of North America. The benefits of these conservation efforts will endure for the enjoyment of future generations.**





## APPENDIX – ACCOMPLISHMENT DETAILS

Habitat Initiative	Direct Programs <sup>1</sup> (Acres)	Extension Programs <sup>2</sup> (Acres)	FY19 Total	FY19 Cost
<b>Habitat Retention</b>				
Conservation Easements	485		485	\$328,866
Land Purchase	0		0	\$2,034
Revolving Land Purchase <sup>3</sup>	69		69	\$22,268
Easement from RLP	132		132	\$119,755
Lease/Conservation Agmt	125	3,303	3,428	\$23,855
<b>Subtotal</b>	<b>742</b>	<b>3,303</b>	<b>4,045</b>	<b>\$496,778</b>
<b>Wetland Restoration</b>				
Perpetual	10		10	\$15,842
Term	2		2	\$2,012
<b>Subtotal</b>	<b>12</b>		<b>12</b>	<b>\$17,854</b>
<b>Upland Restoration</b>				
Conservation Forages	290	368	658	\$32,655
Winter Wheat		4,906	4,906	\$10,767
Nesting Cover Enhancement <sup>4</sup>			158	\$25,532
<b>Subtotal</b>	<b>290</b>	<b>5,274</b>	<b>5,564</b>	<b>\$68,954</b>
<b>Total Acres</b>	<b>1,044</b>	<b>8,577</b>	<b>9,621</b>	
<b>Habitat Management<sup>5</sup></b>			<b>50,007</b>	<b>\$96,423</b>
<b>Total Expenditure FY19</b>				<b>\$680,009</b>

1 Programs whereby DUC directly impacts actions of producers, improves, or protects habitat.

2 Acres impacted whereby DUC extends technical advice and influences land management decisions that are beneficial to both landowners and waterfowl habitat.

3 Uses non-partner funds for the acquisition and partner funds for other direct and staff costs. The acres are not counted as incremental because these will be captured as conservation easements when the land is sold.

4 Acres in this category were previously secured and are not included in the total of habitat accomplishments.

5 These acres include the existing projects requiring annual management to maintain healthy habitats. Acres in this category are not included in the total of habitat accomplishments.



# APPENDIX – ACCOMPLISHMENT DETAILS

Habitat Initiative	Direct Programs <sup>1</sup> (Acres)	Extension Programs <sup>2</sup> (Acres)	FY18 & FY19 Total	FY18 & FY19 Cost
<b>Habitat Retention</b>				
Conservation Easements	1,111		1,111	\$689,278
Land Purchase	0		0	\$2,815
Revolving Land Purchase <sup>3</sup>	118		118	\$46,205
Easement from RLP	173		173	\$181,777
Lease/Conservation Agmt	211	5,891	6,102	\$36,697
<b>Subtotal</b>	<b>1,495</b>	<b>5,891</b>	<b>7,386</b>	<b>\$956,772</b>
<b>Wetland Restoration</b>				
Perpetual	32		32	\$35,514
Term	2		2	\$2,012
<b>Subtotal</b>	<b>34</b>		<b>34</b>	<b>\$37,526</b>
<b>Upland Restoration</b>				
Conservation Forages	558	2,119	2,677	\$75,041
Winter Wheat		12,606	12,606	\$23,534
Nesting Cover Enhancement <sup>4</sup>			230	\$46,717
<b>Subtotal</b>	<b>558</b>	<b>14,725</b>	<b>15,283</b>	<b>\$145,292</b>
<b>Total Acres</b>	<b>2,087</b>	<b>20,616</b>	<b>22,703</b>	
<b>Habitat Management<sup>5</sup></b>			<b>94,749</b>	<b>\$263,094</b>
<b>Total Expenditure FY19</b>				<b>\$1,402,684</b>

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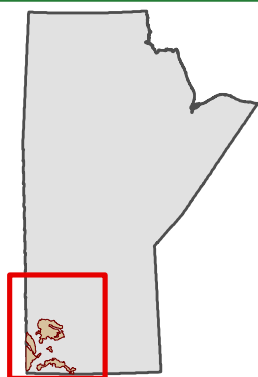
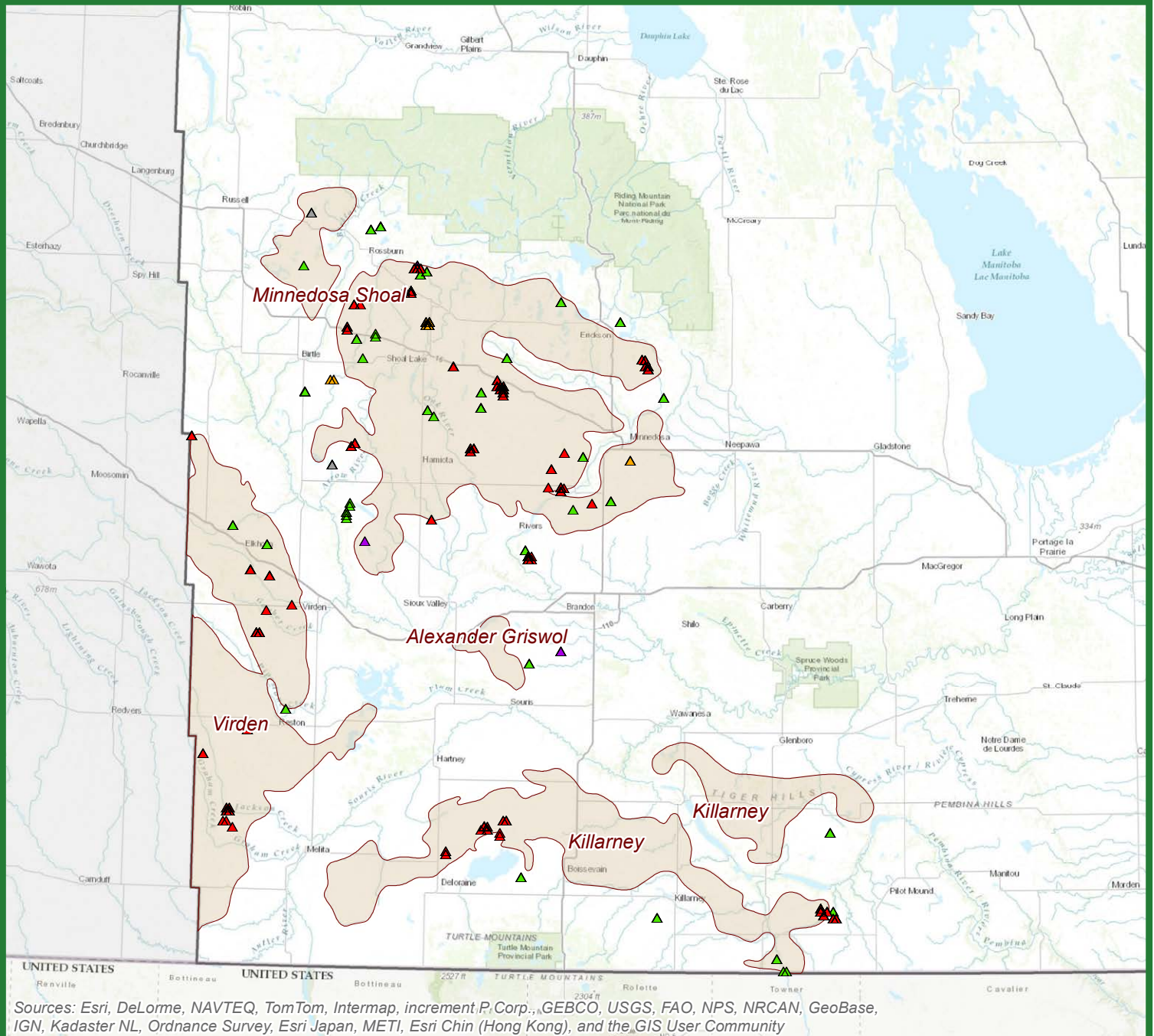
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# DUCKS UNLIMITED CANADA SEGMENTS SECURED IN FY2019 – MANITOBA

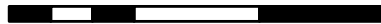


## Securement Method

- |                 |                        |                |                      |             |                    |
|-----------------|------------------------|----------------|----------------------|-------------|--------------------|
| Yellow Triangle | Purchase               | Blue Triangle  | Lease                | Red Outline | DUC Priority Areas |
| Red Triangle    | Paid CE                | Green Triangle | Management Agreement |             |                    |
| Purple Triangle | Conservation Agreement | Grey Triangle  | Other Programs       |             |                    |



0 12.5 25 50 75



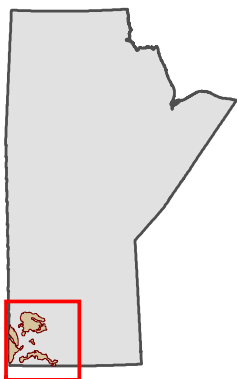
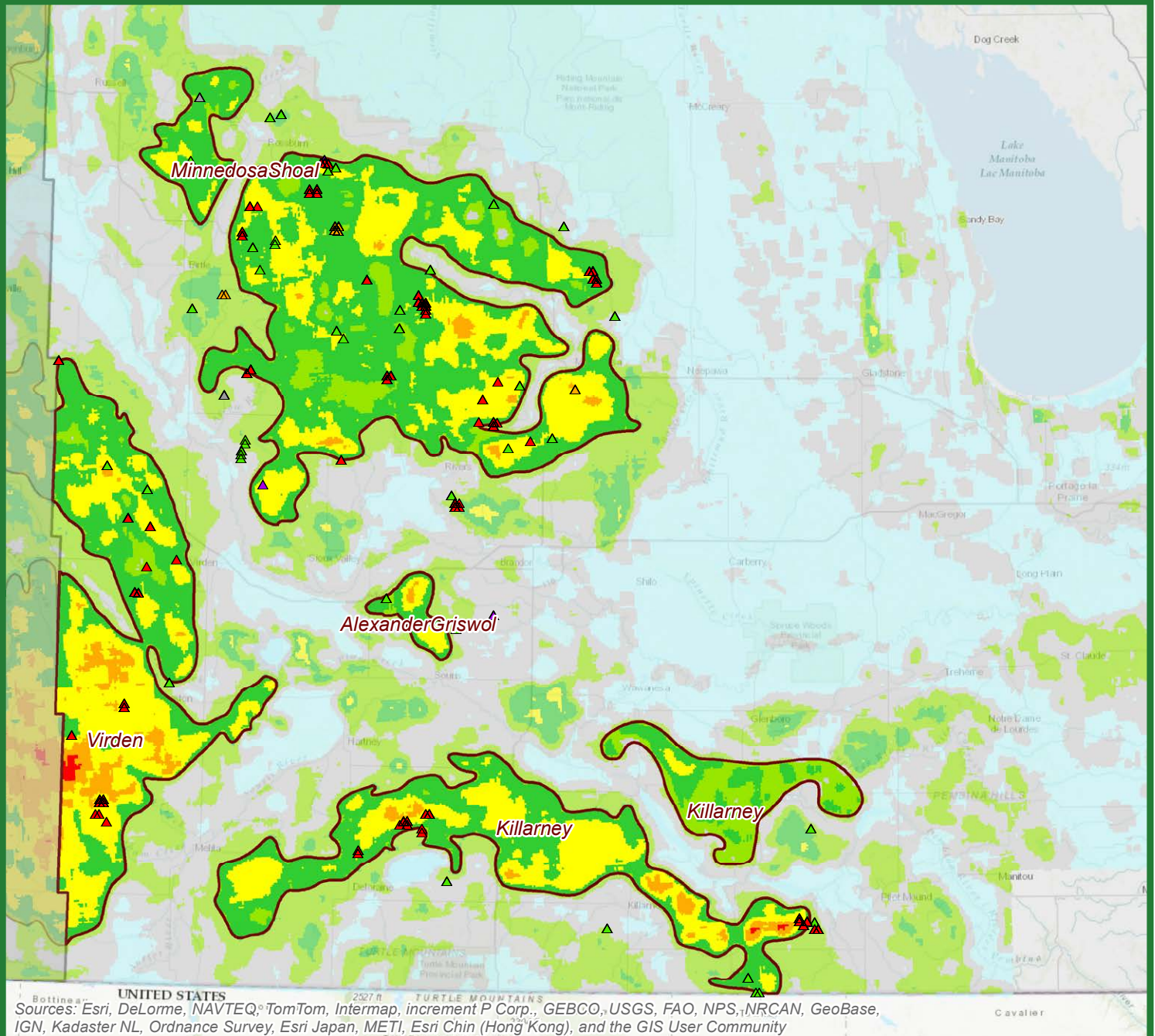
Kilometers

NAD83 CSRS UTM Zone 14N

**Sources:**  
DUC Inventory, Ducks Unlimited Canada, 2019;  
World Topographic Map, Environmental  
Systems Research Institute (ESRI), 2019.



# MANITOBA DUC PRIORITY LANDSCAPES SEGMENTS SECURED IN FY2019 – MANITOBA



**Predicted Breeding Pairs (per sq. mile)**



**Securement Method**

**MB\_FY19**  
**SEC\_MTH**

- ▲ Purchase
- ▲ Paid CE

- ▲ Conservation Agreement
- ▲ Lease
- ▲ Management Agreement
- ▲ Other Programs



0 10 20 40 60

Kilometers

NAD83 UTM Zone 14N

Sources:  
DUC Inventory, Ducks Unlimited Canada, 2019;  
World Topographic Map, Environmental  
Systems Research Institute (ESRI), 2019.